August 14, 2002

Mary Cottrell Secretary Department of Telecommunications and Energy One South Station Boston, MA

## Response to Initial Comments, Docket 02-38

Dear Ms. Cottrell,

We are submitting this letter in response to initial comments received regarding Docket 02-38, "Investigation by the Department of Telecommunication and Energy on its own motion into Distributed Generation". We were impressed by the number of responses to the initial request, and the variety of interested parties.

It was not surprising to see the way the responses to the inquiries were split, with respondents from the utilities advocating standby rates and uniform interconnection standards and the respondents from the DG side asking for a moratorium on standby rates and variable interconnection standards. As a DG developer, we wish to focus our response on the comments made by the utilities.

## Interconnection

In regards to interconnection standards, it is important to distinguish between different types and sizes of generators. The goal of the interconnection standards is to protect the utility's systems and personnel from potential hazards. They are more likely to exist with synchronous generators or large (MW) generators, not with small induction generator units such as we develop. It has been proven that induction generators simply will not operate without utility power. Thus, the induction generators should not be held to the same interconnection standards as these other machines. Similarly, generators that do not export power to the system should not be required to meet interconnection standards for machines that are expected to export power.

Pre-certification of equipment and processes by independent testing laboratories should be acknowledged by the utilities. Equipment that has been pre-certified should not have to endure the costly, time-consuming testing currently required by the interconnection standards. To further reduce the unnecessary costs of interconnection, a DG developer

should not have to go through the interconnection process multiple times for similar installations. Typical installations must also comply with the National Electric Code.

These are ideas which seem to be endorsed by the respondents who either provide, promote, or use distributed generation. The utilities, on the other hand, seem to be in favor of these standards. In addition, they advocate a consensus approach to interconnection standards (as do the respondents in favor of DG), but they do not suggest that these standards would vary by type or size of generator—except to say that they are in the process of creating a standard for small (10kW and under) that will be complete by October 1<sup>st</sup> of this year.

## **Standby Rates**

For twenty years now, the utilities in Massachusetts have not had standby rates associated with distributed generation. In that time, some DG units have been connected to the distribution system. It seems that the sudden push by the utilities for standby rates is a direct result of this proceeding.

While the respondents who are in favor of DG are citing reasons for the exclusion of DG in standby rates, they are also offering suggestions in the event that the Department and the utilities should decide that these rates are, in fact necessary. We would strongly urge the Department not to endorse the adoption of standby rates for small systems.

The utilities claim that it is only fair to adopt standby rates with typical high demand charges, as seen in other states. Without these rates, they cry, they will not be able to properly recover costs from DG customers. The majority of DG customers, however, are partial requirements utility customers. The utility is still recovering their costs from these customers because they are still charging them for their usage, the same as they would be if these customers had not elected to install DG. Standby rates would unfairly discriminate against customers who are actually trying to help the utility by reducing demand load on distribution systems. Shouldn't this kind of activity instead be encouraged by utilities?

There is no need to assess standby charges for customers who install generators of several hundred kW or less. These are customers for which capacity already exists in the utility's distribution system. Standby rates should only be for large generating customers who, with the exception of outages, self-generate. These are the true customers for whom the utility needs to be prepared to provide a substantial amount of power at any given moment.

## **Utility Involvement in Distributed Generation**

There were a number of good ideas presented for ways in which the utilities can get involved in the promotion and utilization of DG. Unfortunately, the utilities do not seem to have a positive attitude towards encouraging DG for their customers or themselves.

They make claims that distributed generation is not cost effective or beneficial to the environment. It is true that certain types of DG, such as diesel-fired backup generators, have some detrimental effects on the environment. It is also true that some types of distributed generation, such as fuel cells, are not cost effective. However, the generalizations made by electric utilities do not account for beneficial forms of DG, such as natural gas fueled combined heat and power induction generators.

Many of the DG installations to which respondents referred were small-scale generators for residential or commercial facilities. When all of those small generators are added up, they may amount to quite a bit of capacity that the utility does not need to upgrade or build. Introducing DG into highly congested transmission systems, such as cities, will minimize the amount of costly upgrades in areas which do not have room to hold more transmission lines.

The utilities, particularly Fitchburg Gas and Electric, attempt to use the number of small generators on the distribution system as a detriment instead of an asset. They claim that the number of generators will slow down their reaction time to outages because personnel will need to check each of these units to ensure that they will not energize the distribution lines. This rhetoric contradicts reality. Any synchronous generator <u>must</u> disconnect on loss of utility power since they would immediately be overloaded. Reconnection requires utility power for synchronization. Any large units could be subject to some utility supervision via telecommunication. Induction machines are physically inoperable without utility power.

From the various comments, it is obvious that this is a complex issue. The status quo may be satisfactory with specific documentation of current actual practices and to the extent that they help or hinder public goals. Perhaps the establishment of a dispute resolution process involving the DTE in specific cases may evolve into an overall policy which would be conducive to realizing the desired objectives.

Sincerely,

Spiro Vardakas President